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## Memorandum from Glenn H. Curtiss, undated

p98 COPY Memorandum in Connection with Interference with Myers.

George F. Myers came to Hammondsport, N. Y. in the winter of 1907 to have some experimental apparatus built by the G. H. Curtiss Mfg. Co., manufacturers of motorcycles and motors. He also brought with him a partially constructed apparatus in the form of a vertical lifting machine and made arrangements to have a motor installed and a test made of this machine. This was done during the winter. The results showed the device to be impractical. At the same time construction work was being carried on in the factory of the Curtiss Co. on aeroplanes for the Aerial Experiment Association, of which I was a member.

The first Myers machine was impractical from every point of view and could never possibly have flown. It was what might be termed "valvular type", that is, a framework covered with loose sections of horizontal surfaces was intended to be raised and lowered upon the body of the machine which contained the gas engine to operate the machine. The loose sections of the surfaces were intended to open as the framework was forced upward and to close as it was pulled down, thereby acquiring a hold on the air by which to lift / the body of the machine, after which the framework was to again be thrust upward, the valves again closing and the body of the machine pulled up another step, from which theory of operation it gained its nickname of the "wind grabber".

After Dr. Myers became satisfied as to the impracticability of this machine, he built another of similar design and construction, but with larger surfaces. This was started in the spring of 1908 in the fruit house of Dr. Babcock in the Village of Hammondsport. The Curtiss Mfg. Co. having refused further credit to Dr. Myers for work in the factory, he continued his experiments by himself or with the assistance of workmen he secured about the village. 2 The second machine was never finished, and in the summer of 1908 he started construction of a machine that might be called an aeroplane. This embodied two super-

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imposed rings about 12 feet in diameter, covered with canvas, one four or five feet above the other. These were to be driven by a screw propeller, and in this respect resembled an aeroplane. Dr. Myers called me into his shop to look at this machine some time in the summer or early fall of 1908. Prior to this time we had been using balancing surfaces, or ailerons, on two of the machines built for the Aerial Experiment Association, i. e., namely, the "White Wing" and the "June Bug", and had at various times had these balancing surfaces fixed normally at a neutral position at the line of flight, so that I am not surprised to learn that Dr. Myers had embodied this means of lateral balance in his new machine. although when I saw the machine I did not / notice any 100 movable surfaces attached for this purpose. I may have seen this machine in the course of construction at other times, but I only recall the time mentioned because I was accompanied by Mr. McCurdy, and we had difficulty in concealing our amusement at the odd construction of the machine, which was clearly inoperative. We were there perhaps ten minutes at this time. I never had any discussion with Dr. Myers in regard to controls or lateral balancing devices for aeroplanes, as I had always found his theories impracticable, and I only listened to him to be courteous when it was impossible to avoid him.

As I recall, there was discussion among the members of the Aerial Experiment Association at various times in regard to the best position for the ailerons. At first they were wired up at a slight lifting angle on the theory that this would make the machine fly stronger, 3 for in those days we did not have powerful engines. Sometimes we had trouble in getting off the ground at all. I distinctly recall that our third aeroplane, called the "June Bug", flew so much stronger than its predecessors that it was possible to carry these ailerons or balancing surfaces at the neutral angle, and that on or about June 15, 1908, flights were made with these balancing surfaces wired up to the control in such a manner that they were substantially neutral to the line of flight when not being operated. I recall that the discussions regarding the construction of lateral balancing devices occurred early in April, 1908, but on account of lack of power in the motor we / used 101 I caused the ailerons to be wired in such a manner that they would tend to lift when the machine was in flight, and

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the first successful flight of which we have a record with the ailerons wired up at a neutral angle was on or about June 15, 1908. Failure to make good flights in the "June Bug" during its first trials was because of leaking surfaces. The machine did not fly strong until we made the surfaces air tight with the use of paint. Up to about this time the ailerons had been set at a slight lifting angle, but were then placed at a neutral angle and the machine was able to fly with them in this neutral position.

I am greatly surprised to learn that Dr. Myers has applied for patents on this balancing device, as the Aerial Experiment Association were along at the time working on the type of machine in which this device was needed, Dr. Myers being of the opinion that the vertical lift machine on which he was working was the only practical type, and it was only after he had 4 seen us make many flights and seen our balancing device in operation that he attempted the construction of a similar design. He was always considered a fanatic.

(SGD.) G. H. Curtiss.